SONY

3-758-592-61(1)

Compact Hi-Fi Stereo System

Operating Instructions

COMPACT disc DIGITAL AUDIO

LBT-G3000

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Precautions

This unit is a compact disc deck receiver which consists of an amplifier, tuner, stereo cassette deck and 5-compact disc player. Before operating this unit, be careful about the followings.

On safety

- Operate the unit only on 120 V AC, 60 Hz.
- Should any solid object or liquid fall into the unit, unplug it and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not to be used for an extended period of time. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.
- As the laser beam used in this compact disc player is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

On installation

- Place the unit on a level surface.
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Good air circulation is essential to prevent internal heat buildup in the unit. Place the unit in a location with adequate air circulation. Do not place the unit on a soft surface, such as a rug that would block the ventilation holes on the bottom.
- Do not place anything on top of the cabinet. The top ventilation holes must be unobstructed for the proper operation of the unit and to prolong the life of its components.

On cleaning the cabinet

Clean the cabinet, panel and controls with a soft cloth lightly moistened with mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

On repacking

Do not throw away the carton and the packing material. It makes an ideal container to transport the unit in.

On moisture condensation

If the unit is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the unit. Should this occur, the player will not operate. In this case, remove the disc and leave the player turned on for about an hour until the moisture evaporates.

If you have any question or problem concerning your unit, please consult your nearest Sony dealer.

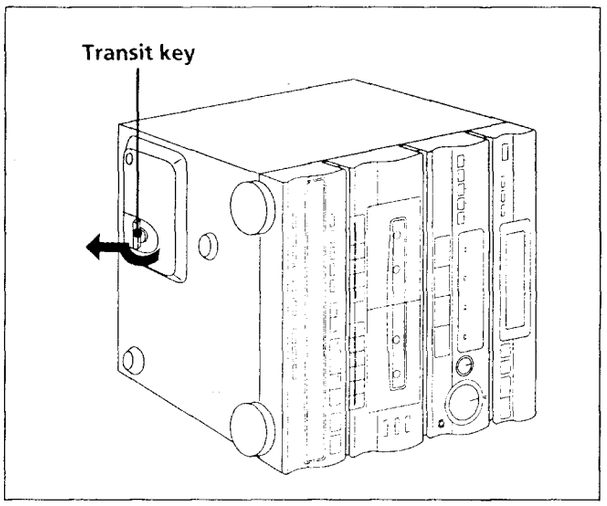
For detailed precautions, see the leaflet "IMPORTANT SAFEGUARDS".

Notes on the transit key

The transit key on the bottom of the unit protects the optical system against shock during transportation.
Before operating the unit, be sure to remove the key by following the instructions on the label, and keep it in a safe place.

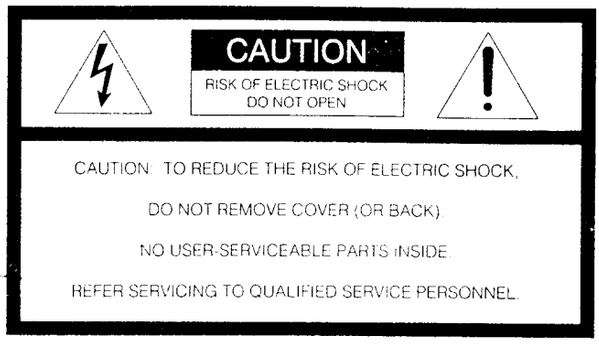
When transporting the unit, re-install the key by following the instructions below.

1 Remove all the discs from the CD section.
2 Press the ⏏ button to close the disc tray and wait for "1 (or 2, 3...)" to disappear from the display.
3 Turn off the power.
4 Insert the key into its original hole and lock it in place.

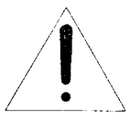


Warning

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

* The graphical symbols are on the rear enclosure.

Note to CATV system installer

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Owner's Record

The model and serial number is located at the rear. Record this serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

LBT-G3000 Serial No. _____

INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

— Reorient or relocate the receiving antenna.
— Increase the separation between the equipment and receiver.
— Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
— Consult the dealer or an experienced radio/TV technician for help.

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

CAUTION

The use of optical instruments with this product will increase eye hazard.

Table of Contents

Getting Started

Warning 2
Precautions 3
Configuration 4
Preparations 5
Connections 6

Using Your Stereo

Turning on the power 7
Adjusting the sound 8
Receiving broadcasts 9
Playing back tapes 12
Recording on tapes 13
Dubbing tapes 15
Playing compact discs 16
Playing in a random order 19
Playing in a desired order and time 20
Playing the beginning of each selection 23
Playing repeatedly 24
Designating the total playing time 25

General

Maintenance 27
Specifications 28
Troubleshooting guide 29
Location of controls 31

Configuration

This manual covers the systems in the chart below.
The model number of your system is shown on the carton box.
Please disregard any instructions which do not apply to your system.

	LBT-G3000
Compact disc deck receiver	HCD-G3000
Speakers	SS-G3000
Remote commander	RM-S221

How to use this manual

Please read the instructions in this manual referring to the illustrations.

- The letters in the illustrations correspond to those in the text: ex. Speaker Cord Connection **A**
- The step numbers in the illustrations correspond to those in the text.
- Use the page numbers in "Location of Controls" at the end of this manual as an index for locating the instructions for use of the buttons and controls.

Preparations

Remote Commander

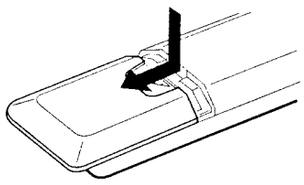
You can control the system (except the cassette deck) with the supplied remote commander.

Insert two R6 (size AA) batteries with the correct polarity.

1 Slide the cover in the direction of the arrow to remove it.

2 Insert two R6 (size AA) batteries correctly so that the ⊕ and ⊖ polarities match the polarity diagrams inside the battery compartment.

1



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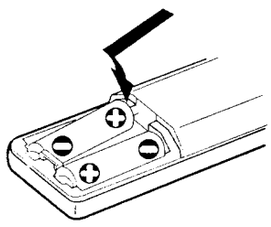


Battery life

About half a year of normal operation can be expected when using the Sony SUM-3 (NS) batteries.
When the batteries are exhausted, the remote commander can no longer operate the unit. If this happens, replace both batteries with new ones.

To avoid battery leakage

When the commander is not to be used for a long period of time, remove the batteries to avoid damage caused by battery leakage and corrosion.

To avoid malfunction of the remote commander

Avoid keeping the commander in extremely hot or humid locations.

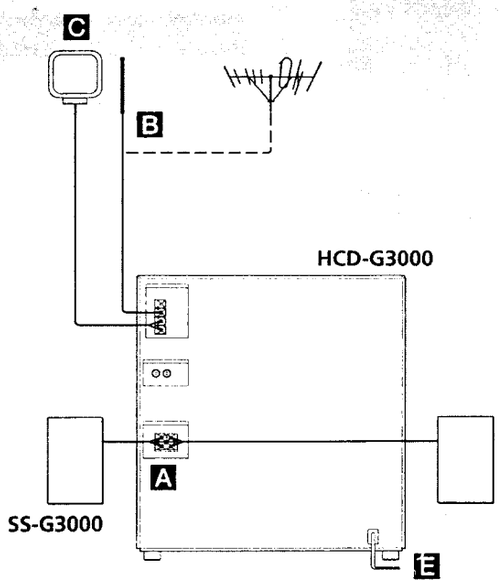
Installation

Place the stereo system in a location with adequate ventilation to prevent internal heat built-up.

On moisture condensation

If the unit is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the unit. Should this occur, the unit will not operate. In this case, remove the discs and leave the unit turned on for about an hour until the moisture evaporates.

Connections

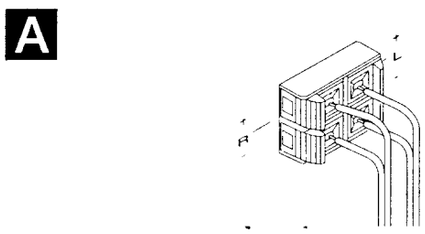


Turn all the power off before making any connections.
The diagram below shows the system connections. The letters in the diagram correspond to those in the text.

Notes on Connections

- Connect the AC power cord last.
- Cord plugs and jacks are colour coded. Red plugs and jacks are for the right channel (R) and white ones are for the left channel (L).

Speaker Cord Connection A

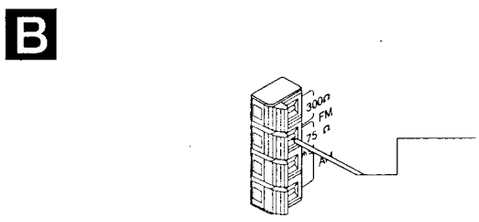


1 Strip 15 mm of the speaker cord coating from the end of the cord.

2 Connect the right speaker to the R (right) speaker terminal, and the left speaker to the L (left) speaker terminal, with the red cords to + and the black cords to –.

Note
When connecting the speaker cords, refer to the instructions supplied with the speakers, since different features are sometimes used to distinguish + and – cords.

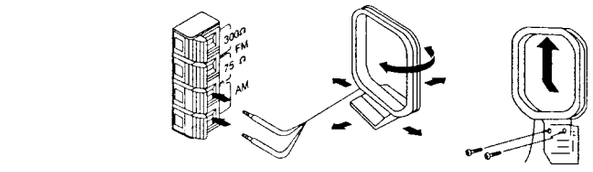
FM Antenna Connection B



Connect the supplied FM wire antenna to the FM 75Ω terminal and extend horizontally.

For better reception
Connect to an outdoor antenna.

AM Antenna Connection C

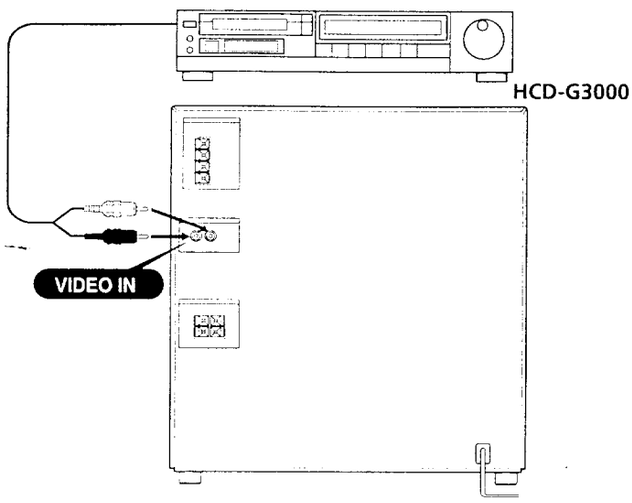


Connect the supplied loop antenna to the AM and ⏚ terminals.
You can attach the loop antenna on the wall using commercially available screws.

For better reception
In addition to the loop antenna, connect an insulated wire of 6 to 15 meters to the AM terminal (the lower terminal). Be sure not to disconnect the loop antenna.

Connections

D



Adding Other Components to the System D

Connecting a video equipment

You can connect a video equipment to the VIDEO IN jacks only for the audio input signal.
To select the video equipment, press the VIDEO button.

Note

When this system is turned on, noise may occur during radio reception or in the picture and sound of the video equipments (TV, VCR, etc.). In this case, place this system away from the video equipments or turn off the power of the unit.

AC Power Cord E

Connect the AC power cord to a wall outlet.

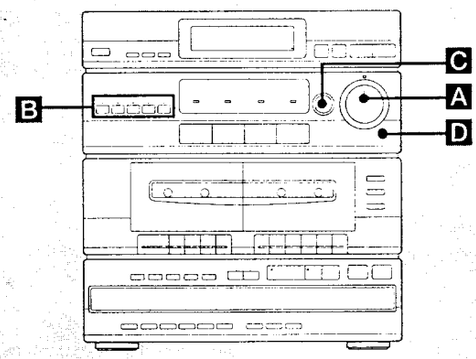
Note

Memories stored in the unit may be lost when the AC power cord is disconnected for a certain period of time.

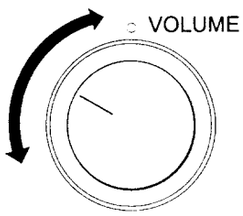
Turning on the Power

Press the POWER button to turn on the power after completing all connections.

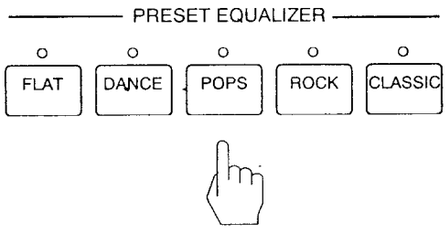
Adjusting the Sound



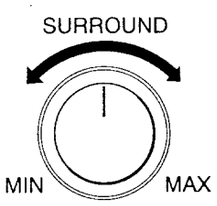
A



B



C



The following operations apply only to reproduced sound.

Adjusting the Volume A

To increase the volume, turn the VOLUME control clockwise.
To decrease it, turn the control counterclockwise.

- Turn down the volume before switching on the unit. This prevents damage to speakers.

Preset Sound Adjustments B

You can adjust the sound quality by simply choosing from 5 preset combinations of equalization effect.
Select the desired equalization effect with the PRESET EQUALIZER buttons.

FLAT: No equalization effect.
DANCE: Gives a sound similar to a disco in which bass sound is intensified.
POPS: Vocal sound is intensified.
ROCK: Effective for playing rock music to reproduce a dynamic sound.
CLASSIC: Obtains wide acoustic when playing the classic music.

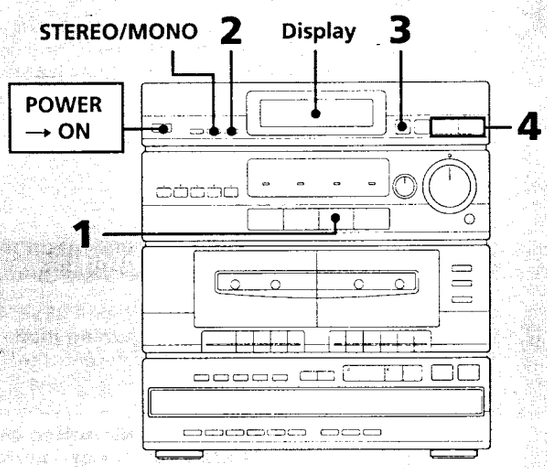
To cancel the equalization effect, press the FLAT button.

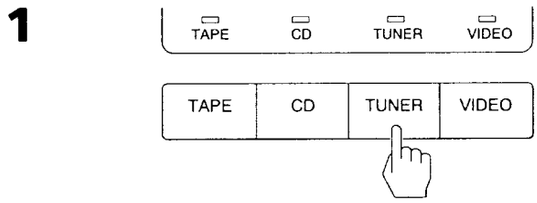
Adjusting the Surround Effect C

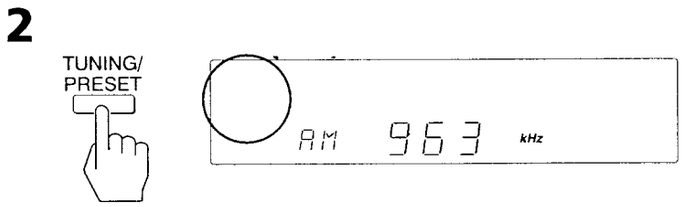
To obtain a stage-like atmosphere for playing stereo sources, adjust the SURROUND control.

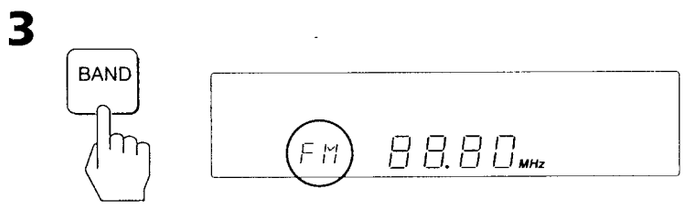
For private listening D
Connect a pair of headphones to the HEADPHONES jack. No sound will be heard from the speakers.

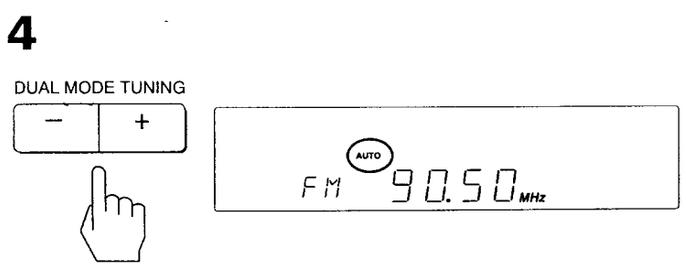
Receiving Broadcasts











You can listen to FM and AM stations.

1 Press the TUNER button.

2 Press the TUNING/PRESET button to enter the tuning mode.
"PRESET" and the preset code disappear.

3 Press the BAND button repeatedly until the desired band appears.
Each time you press the BAND button, the received band changes as follows:

FM → AM

4 Keep the DUAL MODE TUNING + or – button pressed for over 1 second so that "AUTO" appears.
The unit starts scanning frequencies and stops when it tunes into a station. Repeat this step until the desired station is tuned in.

The "TUNED" indicator appears
When a station of sufficient signal strength is tuned in.

The "STEREO" indicator appears
When an FM stereo program of sufficient signal strength is tuned in.

When you press the TUNER button
The CD player is automatically turned off so that radio broadcast may not be disturbed by noise.

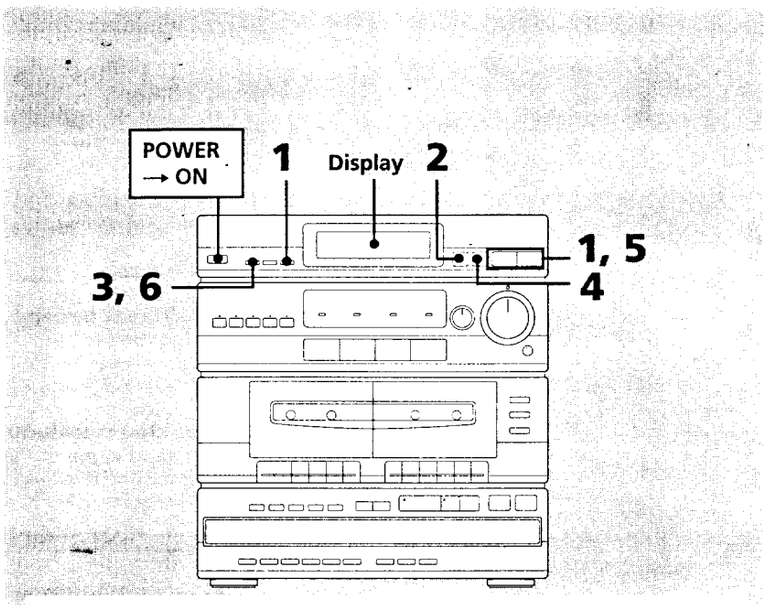
For receiving FM stations in stereo
If the MONO indicator is lit, press the STEREO/MONO button so that the indicator goes out.

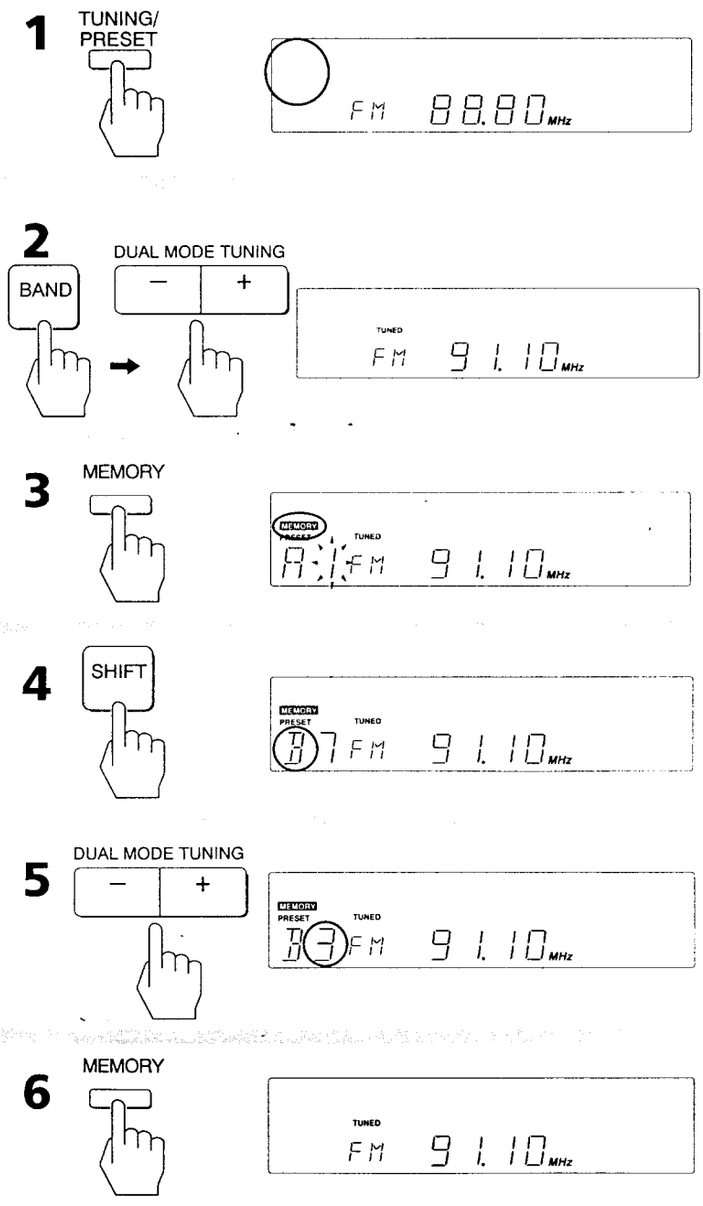
When an FM stereo program is noisy or hard to receive
Press the STEREO/MONO button to change the mode over the MONO. This eliminates the stereo effect, but the noise will be greatly reduced.
To return to the stereo mode, press the STEREO/MONO button again. The MONO indicator goes off.

If you cannot tune in a desired station
A station with a weak signal may be skipped. In this case, tune in the station manually.
- Press the DUAL MODE TUNING + or – button again to stop scanning.
- Press the DUAL MODE TUNING + or – button repeatedly and tune in the exact frequency.

Note
The controls of the tuner become inactive when you press any of the function buttons other than the TUNER button.

Receiving Broadcasts





You can store station frequencies in the unit's memory for quick recall later on. Up to 30 frequencies in any band can be stored by specifying a code for each frequency. The code is a combination of a letter — A, B or C — and a number — 0 to 9: A-1, A-2, ..., A-9, A-0, B-1, ..., C-1, ..., C-0.

Storing Stations

1 Press the TUNING/PRESET button to enter the tuning mode.
"PRESET" and the preset code disappear.

2 Press the BAND button and DUAL MODE TUNING + or – button to tune in the desired station. (See page 18.)

3 Press the MEMORY button.
"PRESET" and "MEMORY" appear on the display.
While a number of the last memorized code is blinking, proceed to step 4.

4 Press the SHIFT button to select a letter (A, B or C).
The last memorized number with the selected letter appears.

5 Press the DUAL MODE TUNING + or – button to select a number (0 – 9).

6 Press the MEMORY button.
"PRESET" and "MEMORY" disappear. A code is specified and the setting of the STEREO/MONO button is also stored. One second later, the code disappears and the tuner enters the tuning mode again.

If you cannot store a station successfully

Be sure to press the buttons for the code while the "MEMORY" indicator lights. If the indicator has gone off, press the MEMORY button again.

To erase a stored station

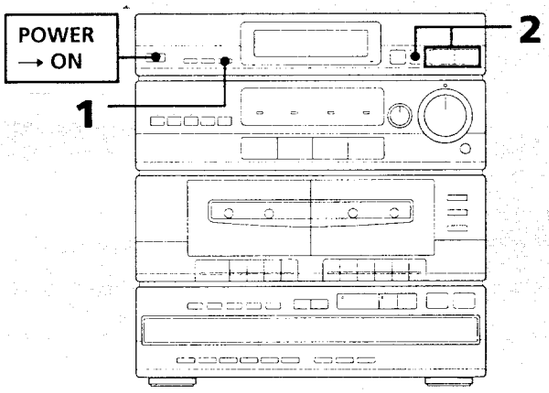
Storing a new station on a used code erases the previously stored one.

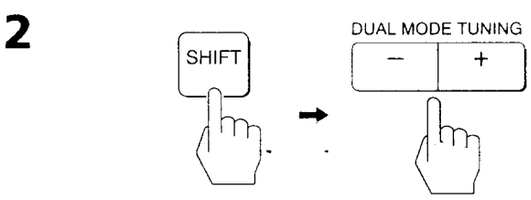
To select the preset channel directly using the DUAL MODE TUNING buttons

Each time you press the DUAL MODE TUNING button in step 4, the code (combination of a letter and a number) can be selected without pressing the SHIFT button and you can skip to step 6. The preset channel changes as follows:

A1 ⟷ A2 ⋯ A9 ⟷ A0
C0 ⋯ C1 ⟷ B0 ⋯ B1

Receiving Broadcasts





Tuning into a Stored Station

1 Press the TUNING/PRESET button to enter the preset mode. ("PRESET" and the preset code appear.)

2 Press the SHIFT button and the DUAL MODE TUNING + or – button to specify the code for the desired station.

Changing the AM Tuning Interval

The unit tunes in AM stations at 10-kHz intervals. To use the unit where the tuning interval is 9-kHz, change the setting as follows:

1 Turn on the power.
2 Tune in any AM station.
3 Turn off the power.
4 While pressing the DUAL MODE TUNING + button, turn on the power.

To reset the interval, repeat the same procedure.

Important

- Stored stations will be erased from the memory when you change the interval.
- Stored stations will be erased from the memory when the AC power cord is disconnected for a long time.

Playing Back Tapes

You can use tapes of type I and II for playback.

Playing Deck A or B

1 Press the TAPE button.

2 Press the ■/⏏ button.

3 Insert a recorded tape.

4 Press the TAPE SELECT button to select tape type.

5 Press the ► button.
Playback starts.

When the tape is played to the end, the deck stops.

To stop during playback, press the ■/⏏ button.
To fast forward or rewind, press the ►► or ◄◄ button.
To pause, press the II PAUSE button. To resume, press the II PAUSE button again.

To play a tape recorded with the Dolby NR* effect

Set the DOLBY NR switch to ON. The setting is operated on both decks. This unit is provided with DOLBY B NR system.

When both decks are set to play mode

Only the sound from deck B will be heard.

Note

When a deck is operated while recording or playing back a tape on the other deck, sound waver (uneven rotation) may result.

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

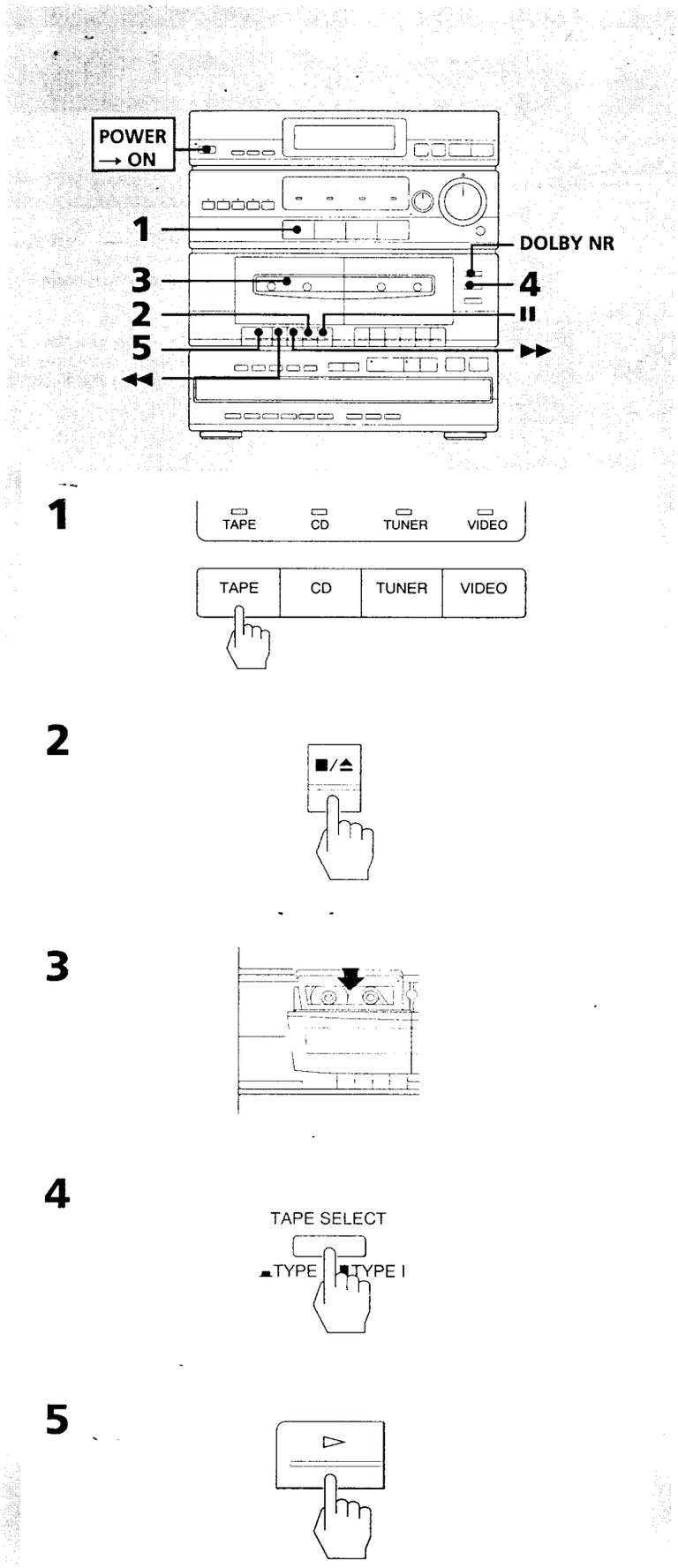
Playing from Deck to Deck – Relay Play

1 Insert tapes into decks A and B.

2 Press the ► button on deck B.
Deck B starts playing.

3 Press the II PAUSE button and the ► button on deck A.

When the tape in deck B ends, the tape in deck A starts playing.



Recording on Tapes

You can use tape type I and II for recording.

Recording a Tape

1 Select a source (except TAPE) with the function selectors.

2 Insert a blank tape into deck B.

3 Press the TAPE SELECT button to select tape type.

4 Set the DOLBY NR switch to ON or OFF.
The Dolby NR (noise reduction) system reduces tape hiss noise in low-level, high-frequency signals by boosting the signals during recording and then lowering them during playback.

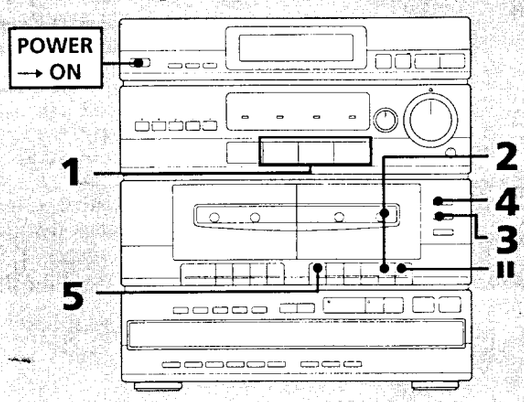
5 Press the ● REC button and start the selected source.
Recording starts.

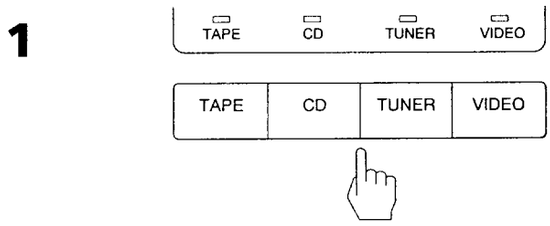
When the tape is recorded to the end, the deck stops.

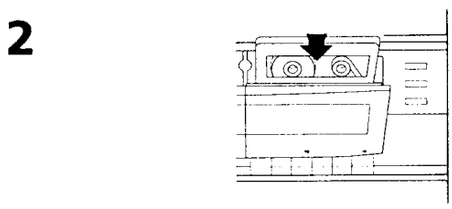
To stop during recording, press the ■/⏏ button.

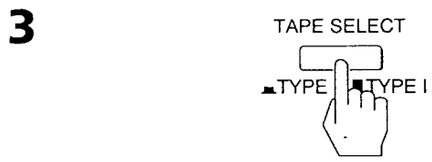
To start recording more precisely

1 After steps 1 to 3 above, press the ❚❚ PAUSE button on deck B.
2 Press the ● REC button.
3 Press the ❚❚ PAUSE button again to start recording.







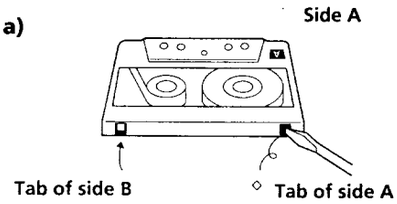


Recording on Tapes

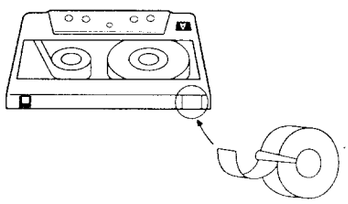
Protecting Your Recording

Break off the tab of the side to be protected. For side A, break off the right-hand tab facing the side A up (a)).
This prevents further recording on that side.
To record on a protected tape, cover the opening with plastic tape (b)).

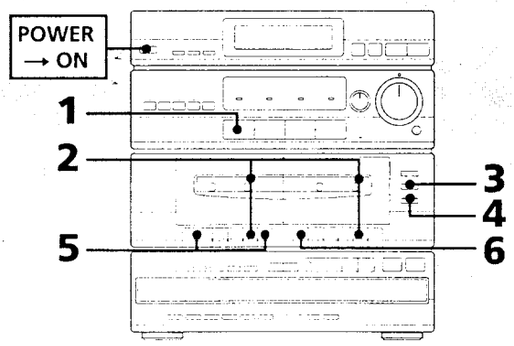
a)

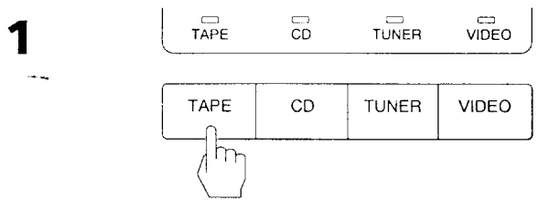


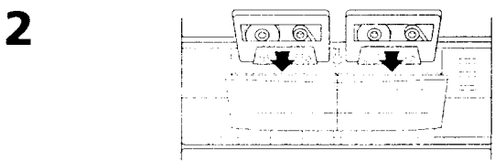
b)

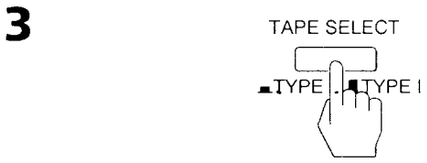


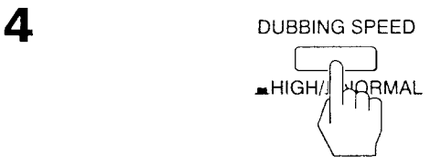
Dubbing Tapes

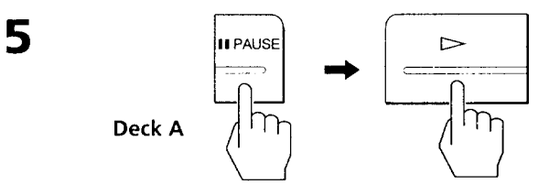












You can dub a tape in deck A onto a tape in deck B.

1 Press the TAPE button.

2 Insert a recorded tape into deck A and a blank tape into deck B.

3 Press the TAPE SELECT button to select tape type.
Be sure to use tapes of the same type for dubbing, as the switch setting is effective on both decks.

4 Select dubbing speed (NORMAL or HIGH) with the DUBBING SPEED button.

5 Press the II PAUSE button, then the ► button on deck A.

6 Press the ● REC button on deck B.
Dubbing starts.

To stop dubbing, press the ■/⏏ button on deck A, then press the ■/⏏ button on deck B.

You need not designate the Dolby NR system

The tape in deck B is recorded with the same recording level and Dolby NR system as the original tape in deck A.

You can listen to other program sources during dubbing

Select the program source with the function selectors.

Playing Compact Discs

You can enjoy various play modes provided with the CD player.

Playing the Entire Disc – Continuous Play

1 Press the CD button.

2 Press the ≜ OPEN/CLOSE button.

3 Place a disc with the printed side up on the tray.

4 Press the DISC SKIP button to place up to four more discs in the tray when you want to play more than one disc.

5 Press the ≜ OPEN/CLOSE button to close the tray.

6 Press the CONTINUE button to choose whether to play one disc (1 DISC) or all discs (ALL DISCS).

7 Press the ► or the DISC SELECT 1-5 button.

To stop during play, press the ■ button.
To pause, press the II button.
To resume play, press the ► or the II button again.
To stop play and open the tray, press the ≜ OPEN/CLOSE button.
To close the tray and start playing, press the ► or the DISC SELECT 1-5 button.

The "no d ISC" indication appears

When there is no disc at all in the tray.

To play an 8-cm CD

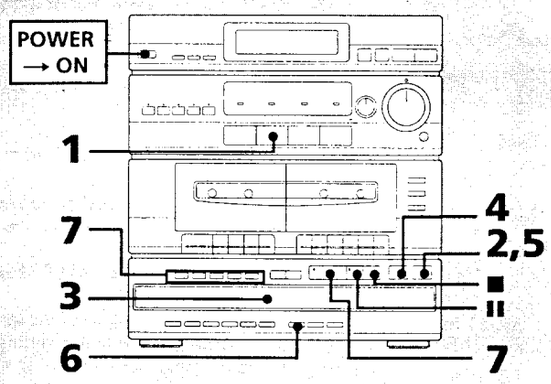
Place it on the inner circle of the tray. If the disc is provided with an adaptor, first remove it.
Do not put a 12-cm CD upon an 8-cm CD.

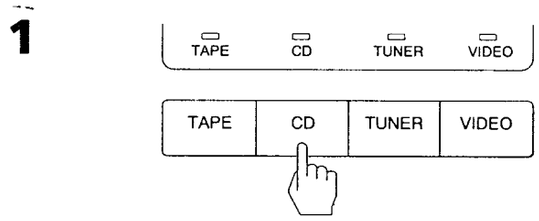
If you press the TUNER button during play

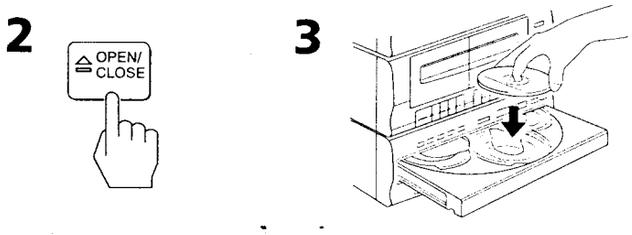
The disc play stops and all buttons on the CD player other than the ≜ OPEN/CLOSE button cannot be operated.

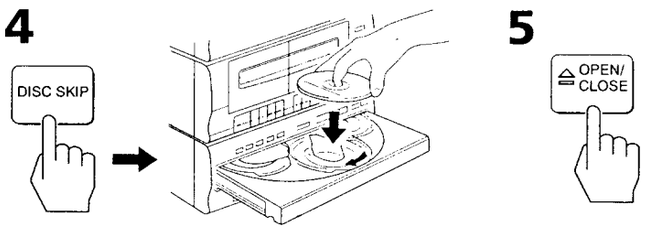
Caution on volume adjustment

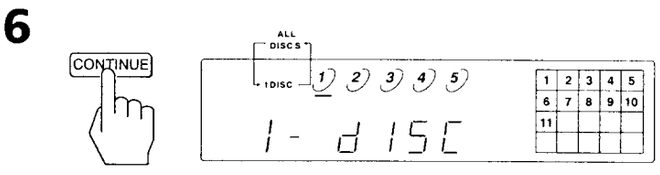
Do not turn up the volume while listening to a section with very low level output or no audio signals, since the speakers may be damaged when the peak level section is played.

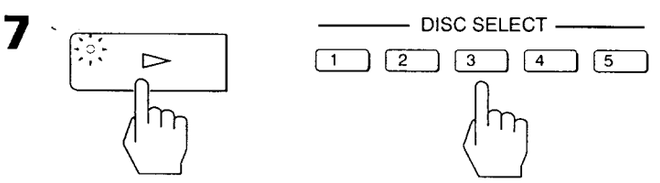




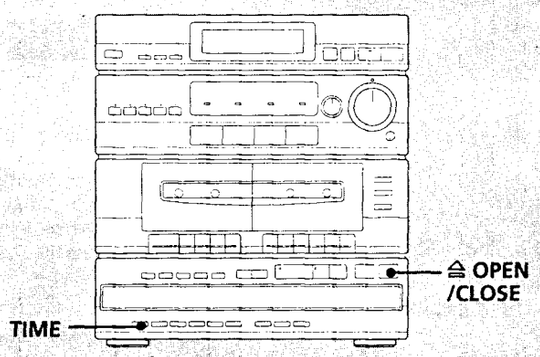




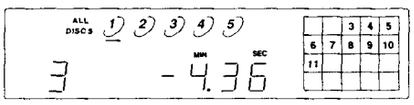




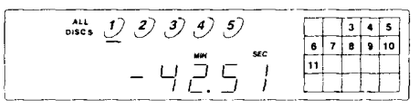
Playing Compact Discs



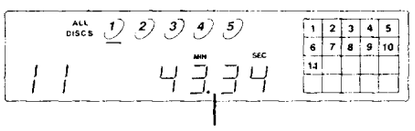
a)



b)



c)



appears for a few seconds

Information in the Display

To check the remaining or total playing time

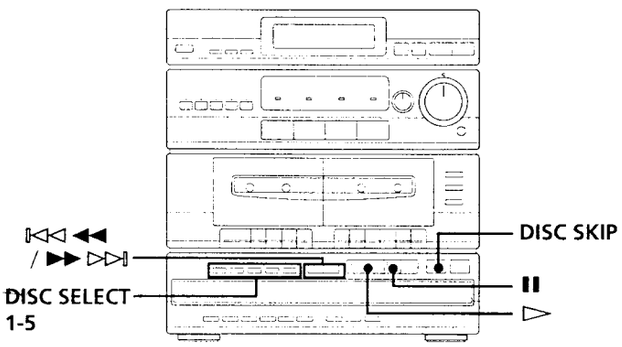
Use the TIME button on the player.

To check	Press
Remaining time of the current selection	TIME once during play (Fig. a))
Remaining time on the current disc	TIME twice during play (Fig. b)) Press once more to resume the prior display.
Total playing time	TIME in stop mode (Fig. c))

Notes

- You can check the remaining time during continuous, shuffle and program play.
- The total playing time and number of selections also appear in the display when you press the ⏏ OPEN/CLOSE button to close the disc tray.
- While playing a selection number 24 or above, "--.--" is displayed.

Playing Compact Discs



Selecting a Desired Disc

You can locate the beginning of any disc by using the DISC SELECT 1-5 buttons or the DISC SKIP button during play.

To select a particular disc, press the corresponding DISC SELECT 1-5 button.
To move the disc tray next to the current one, press the DISC SKIP button.

Locating a Particular Selection

You can locate the beginning of a desired selection on the disc being played during stop, play or pause mode.

To locate the beginning of the current or preceding selection

Press the ⏮ ◀◀ button as many times as required.

To locate the beginning of a succeeding selection

Press the ▶▶ ⏭ button as many times as required.

Locating a Particular Point on the Disc

To search quickly while monitoring the sound

Keep the ▶▶ ⏭ or the ⏮ ◀◀ button pressed during play, then release it at the desired point.

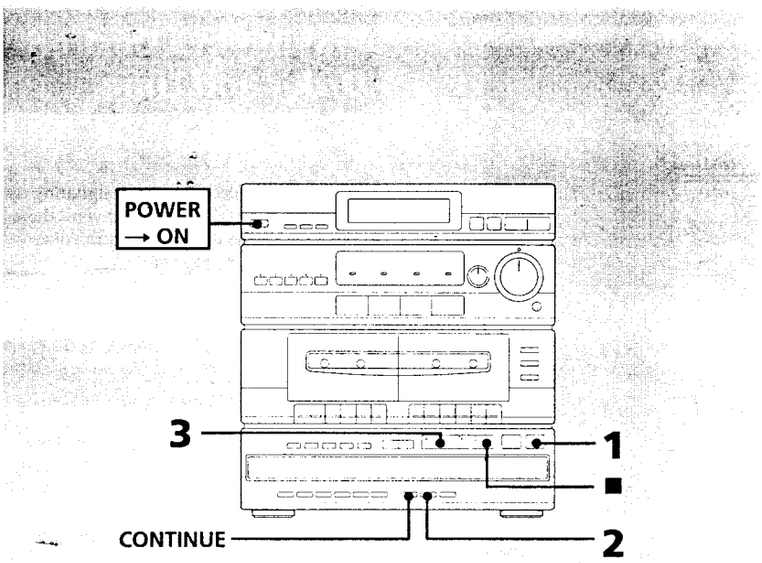
To search quickly while observing the display

Press the II button to pause, then keep the ▶▶ ⏭ or the ⏮ ◀◀ button pressed. The search speed will increase but there will be no sound. Watch the display to find the desired point. To resume play, press the ▶ or the II button at the desired point.

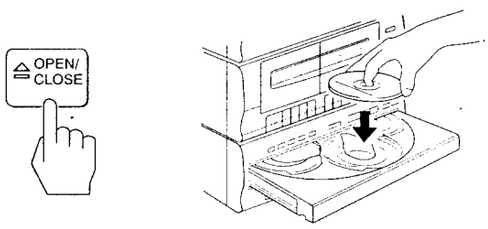
The " ᒣᒣ " indicator is displayed

When you reach the end of a disc by continuously pressing the ▶▶ ⏭ button. Press the ⏮ ◀◀ button to return to normal indication.

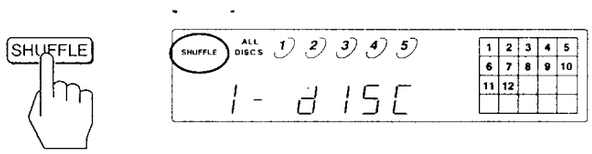
Playing in a Random Order



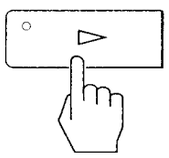
1



2



3



You can have the selections played in a random order.
The unit will play all the discs, or just one disc you desire.

Shuffle Play

1 Place a disc on the tray and close it with the ≙ OPEN/CLOSE button.

2 Press the SHUFFLE button to choose whether to shuffle between "ALL DISCS" (press once) or "1 DISC" (press twice), depending on the number of discs inserted.
"SHUFFLE" appears in the display.

3 Press the ► button.
Shuffle play starts.

To stop playing
Press the ■ button.

To cancel shuffle play
Press the CONTINUE button and the unit enters continuous play mode. "SHUFFLE" disappears from the display.

What is this indication?

This indication appears while the player is "shuffling" the selections.

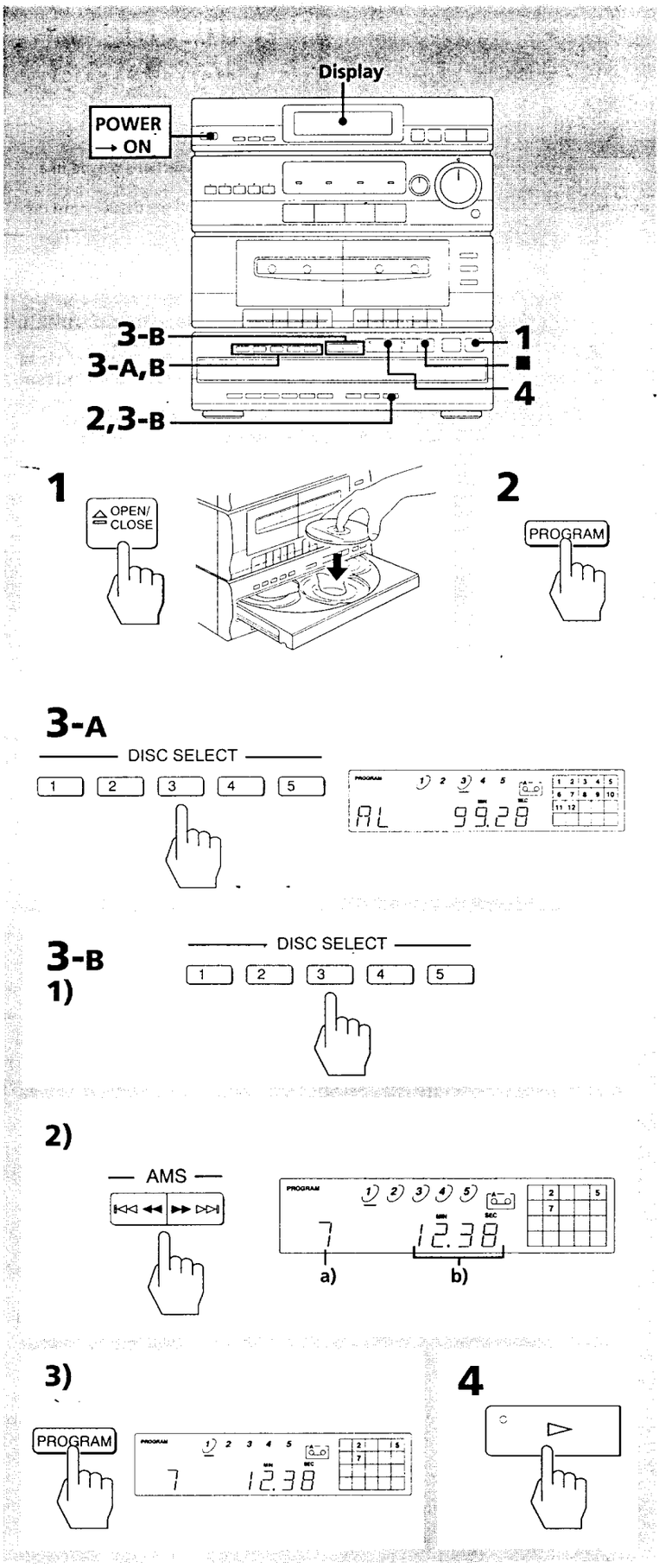
To Play Only the Desired Discs in a Random Order — Select Shuffle Play

Select the desired discs during stop mode (ALL DISCS SHUFFLE mode).

To select the desired discs
Press the DISC SELECT 1-5 buttons.
A circle will appear around the selected disc number. To choose another disc, press the desired disc number button.
Press the ► button to start select shuffle play.

To delete a disc which you have selected
Press the DISC SELECT 1-5 button for that disc. A circle will disappear around the selected disc number.

To put back all discs which you have deleted, press the SHUFFLE button twice.



Playing in a Desired Order and Time

You can make a program by designating up to 24 selections in the order you want them to be played. The unit will play the disc according to your program.

Designating the Playing Order

1 Place a disc on the tray and close it with the ≙ OPEN/CLOSE button.

2 Press the PROGRAM button.
"PROGRAM" appears in the display.

3-A
To program discs in the order you want to play
Press the DISC SELECT 1 - 5 button in the order you want to program.
"AL" appears in the display.

3-B
To program selections on a disc in the order you want to play

1) Select the desired disc with the DISC SELECT 1 - 5 button.

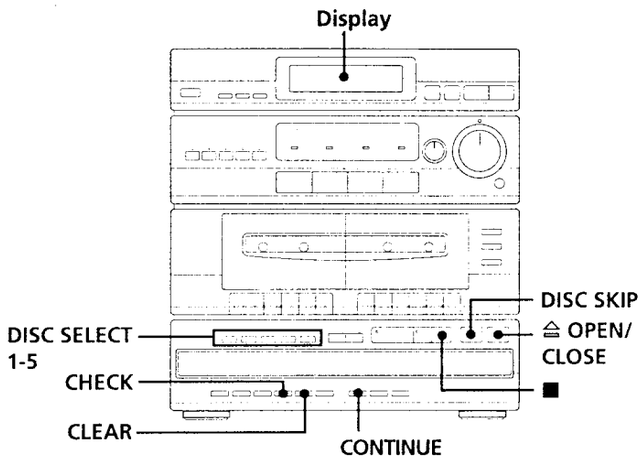
2) Press the I◄◄ ◄◄ or ►► ►►I button repeatedly until the desired selection is located.
a) Selection to be programmed
b) Total program time

3) Press the PROGRAM button.
The selection is stored, and the blinking number in the display lights up.
Repeat 2) and 3) to select another selection.
To program the selection(s) on another disc, repeat 1), 2) and 3).

4 Press the ► button to start playback.

To stop playing
Press the ■ button.

You can play the same program repeatedly as long as you do not cancel program play or erase the program.



Playing in a Desired Order and Time

To erase the entire program

- Press the ■ button once during stop; twice during play.
- Press the ≙ OPEN/CLOSE button.
- Turn off the power.
- Press the CONTINUE button.

If you press the PROGRAM button during continuous or shuffle play

The selection being played will be the first one in the program.

To program a whole disc

- Using the DISC SELECT 1-5 buttons
  After steps 1 and 2:
  1 Press one of the DISC SELECT 1-5 buttons to select the disc.
  2 Go on to step 5.
- Using the DISC SKIP button
  After steps 1 and 2:
  1 Press the DISC SKIP button to select the disc, "AL" appears in the display.
  2 Go on to step 5.

The whole disc is programmed as one step.

To check your program

Press the CHECK button. The first selection in the program will be displayed.
Each time you press the CHECK button, the next selection in the program will be displayed. After the last selection, "End" will be indicated and the display will soon return to the initial status.

If the selection number is displayed instead of the actual time

- the total time is 100 minutes or more.
- you try to program over 24 selections.

Changing Your Program

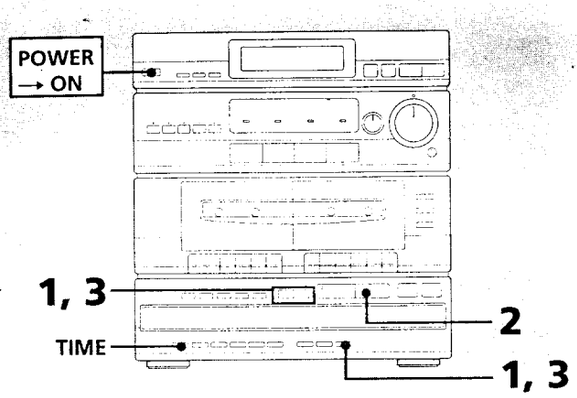
You can make the following changes before starting play.

To erase the last selection, press the CLEAR button during stop mode.
Each time you press the CLEAR button during stop mode, the last selection in the program will be erased.

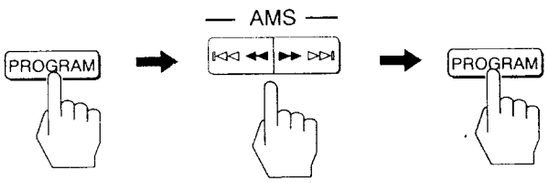
To delete a selection, press the CHECK button repeatedly until the undesired selection is displayed. Then press the CLEAR button.

If you want to change the order, erase the entire program by pressing the ■ button in stop mode, and then repeat the programming procedure from the beginning.

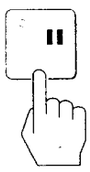
Playing in a Desired Order and Time



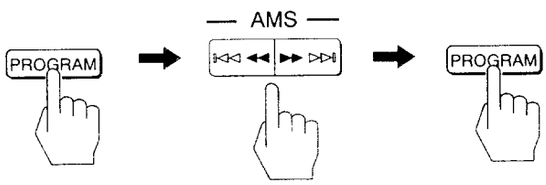
1



2



3



Making a Program for Editing a Tape

You can insert a pause in your program by pressing the II button. Use this function to make a program for both sides of the tape at one time.

1 Program the selections for side A.
(See page 20).

2 Press the II button.
"P" will appear in the display and the total playing time will be reset to 0.

3 Program the selections for side B.
(See page 20).
When you start playing, the selections for side A will be played and then the unit will pause with the chosen selections for side B illuminated in the display. Set the tape to the beginning of side B, then press the ► or the II button. The selections for side B will be played.

What is the tape indicator?

During program play, the tape indicator shows side A or B being played.

A : Side A is being played.

B : Side A has been played and the unit is in pause mode, or side B is being played.

To check the step of programmed selections

Press the CHECK button during stop mode. The number of programmed steps will be displayed for a few seconds in the display.

To check the remaining time

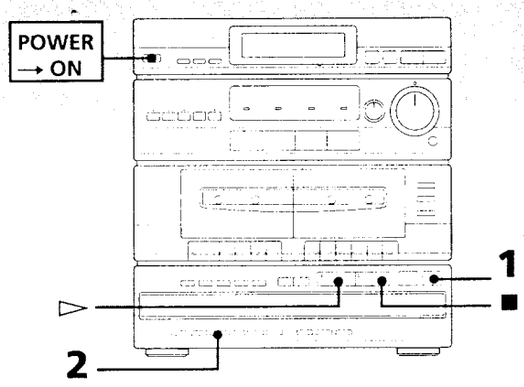
Press the TIME button once to check the remaining time of the selection being played; twice to check the total remaining time; once more to return to the initial display.
If you have inserted a pause, the display shows the remaining time until the pause.

A appears while cheking the program for side A and B appears while checking the program for side B.

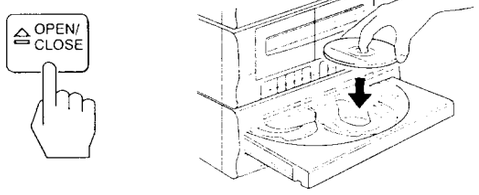
Note

When selections have been programmed for sides A and B, the total playing time displayed during stop mode will show the selections programmed for side B and the total playing time for side B.

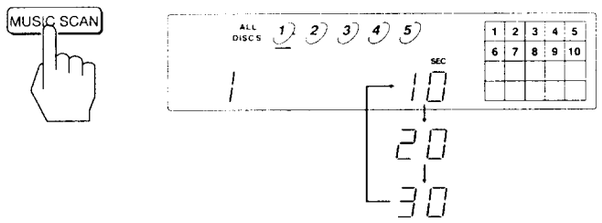
Beginning of Each Selection



1



2



You can check the selections by scanning the beginning of each selection on the disc. You can use this function in any play mode. While "ALL DISCS" is selected in continuous mode, the first selection of each disc will be scanned.

Music Scan Play

1 Place a disc on the tray and close it with the ≙ OPEN/CLOSE button.

2 Press the MUSIC SCAN button.
Each selection will be played for 10 seconds and then fade out for 2 seconds. After all selections are played, scan play will end.
When you press the MUSIC SCAN button again while playing the beginning of a selection, playing will be extended for another 10 seconds up to 30 seconds.

To cancel the music scan mode and continue playing

Press the ► button.

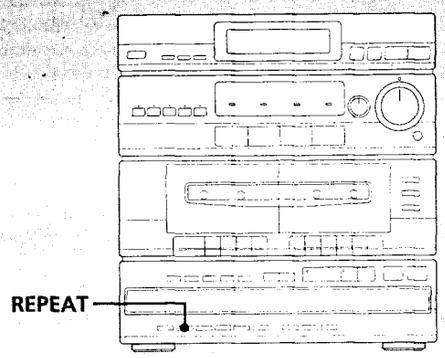
To stop music scan

Press the ■ button.

Note

- Programmed pauses in program mode will be disregarded during music scan play.
- If you press the ⏮ ◀◀ / ▶▶ ⏭ button, music scan will be cancelled.

Playing Repeatedly



You can choose between two different repeat play modes. One repeats all the selections in the current play mode; the other repeats a single selection. Use the REPEAT button on the unit to do this operation. Repeat play functions during any playing modes except multi-disc program.

Repeating all the selections (in any play mode) a)

Press the REPEAT button so that "REPEAT" lights up in the display.

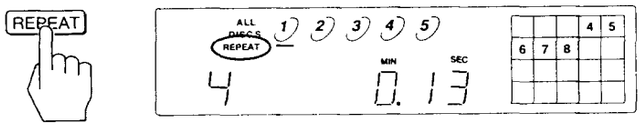
Repeating a single selection (in continuous play mode only) b)

Press the REPEAT button so that "REPEAT 1" lights up in the display while playing the desired track.

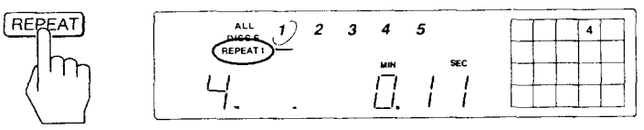
To cancel repeat play

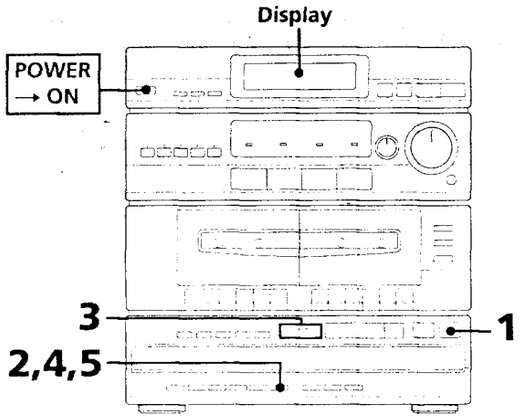
Press the REPEAT button so that "REPEAT" or "REPEAT 1" disappears from the display.

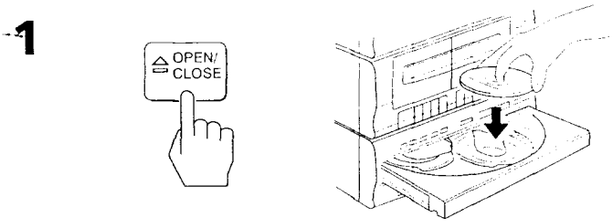
a)

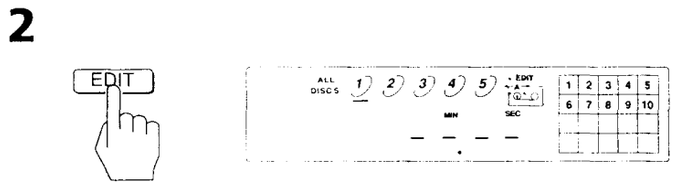


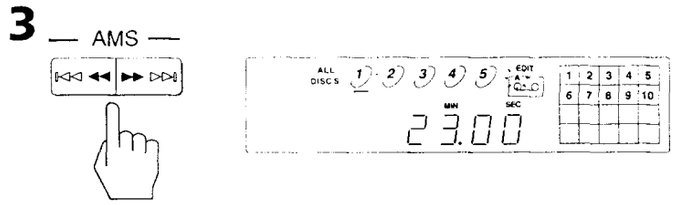
b)

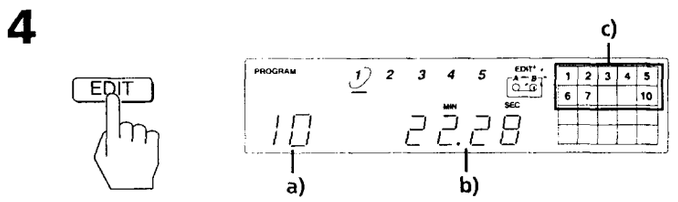


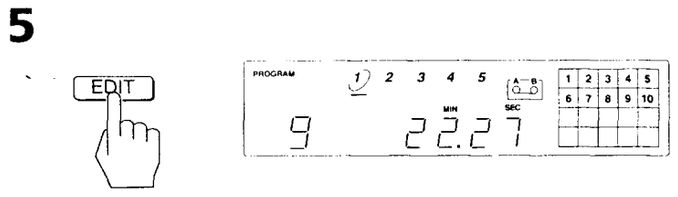












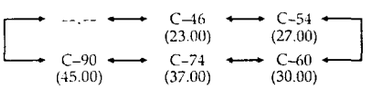
Total Playing Time

You can designate a playing time and the unit will make two different programs of selections each fitting within that period. Use this function, by designating the length of your tape, for editing both sides of a tape.
This feature, called Time Edit, sets the playing time of each program within the designated time automatically by choosing selections in numerical order.
You can also program desired selections by priority. In this case, you can designate desired selections beforehand and the remaining selections will be programmed to fit the remaining time.

1 Place a disc on the tray and close it with the ⏏ OPEN/CLOSE button.

2 Press the EDIT button and display "EDIT".

3 Press the ⏮ ◀◀/▶▶ ⏭ button.
Each time you press the ⏮ ◀◀/ ▶▶ ⏭ button, the display changes to give you the following durations:



4 Press the EDIT button.
The selections for side A are determined automatically. Then the display shows the last selection to be recorded (a)), total playing time (b)), and the selections to be recorded (c)).

5 Press the EDIT button once more while "B" in the tape indicator is blinking.
Another program for the other side is completed.

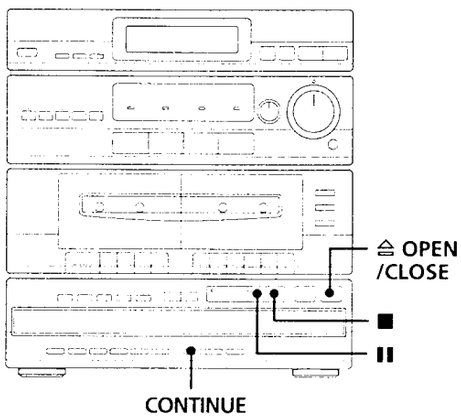
To play the program

Press the ▶ button.
The selections for side A will be played and then the unit will pause. Set the tape to the beginning of side B, then press the ▶ or the ⏸ button. The selections for side B will be played.

Note

Playback can be performed when "EDIT" is displayed.

Designating the Total Playing Time



To stop playing

Press the ■ button.
You can play the same program repeatedly as long as you do not cancel the edit or erase the program.

To erase the entire program

- Press the ■ button once during stop; twice during play.
- Press the ⏏ OPEN/CLOSE button.
- Turn off the power.
- Press the CONTINUE button.

To check the program

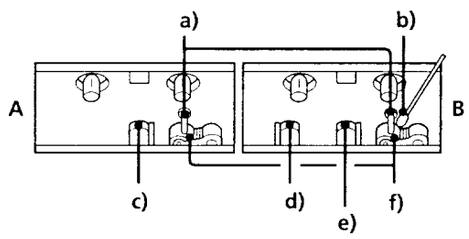
See page 21.

To designate a different time for each side

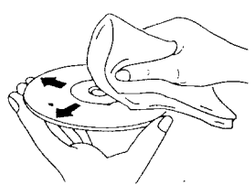
Execute steps 1 to 4 on page 25, then press the II button. Then execute steps 2 to 4 for the other side.

Maintenance

A



B



Keep your system in good condition to obtain the best sound.

Cleaning the Cabinets

Use a soft cloth lightly moistened with a mild detergent solution.

Cleaning Heads and Tape Paths A

Clean after every 10 hours of use and before recording.

1 Press the ■/⏏ button to open the cassette holder.

2 Moisten a cotton swab slightly with cleaning fluid or alcohol.

3 Wipe heads, pinch roller and capstans.

Fig. A shows:
a) Capstan
b) Cotton swab
c) Playback head
d) Erasing head
e) Playback/recording head
f) Pinch roller

Do not insert a cassette until cleaned areas are completely dry.

Demagnetizing the Heads

Remove magnetism built up on the heads after every 20 to 30 hours of use.
Turn off the power before demagnetizing the heads. Use any commercially available demagnetizer.

Cleaning Discs B

When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the center outward.
Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for analog discs.

Specifications

Compact disc deck receiver (HCD-G3000)

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
With 6-ohm loads, both channels driven, from 70 - 20,000 Hz; rated 50 watts per channel minimum RMS power, with less than 0.9% total harmonic distortion from 250 milliwatts to rated output.

Amplifier

Input	Jack type	Sensitivity	Impedance
VIDEO	Phono	300 mV	47 kilohms

Output	Jack type	Impedance
HEADPHONES	Stereophono	Accepts headphones of 8 ohms or more

Frequency response 15 Hz to 50 kHz $^{+0}_{-3}$dB

Tuner

System: FM stereo; FM/AM superheterodyne tuner

FM tuner section
- Tuning range: 87.5 to 108 MHz
- Antenna: 300 ohms balanced; 75 ohms unbalanced
- Intermediate frequency: 10.7 MHz

AM tuner section
- Tuning range: 530 to 1,710 kHz
- Antenna: AM loop antenna; External antenna terminal
- Intermediate frequency: 450 kHz

Cassette deck

Recording system: 4-track 2-channel stereo

Frequency response: DOLBY NR OFF
With Type II cassette (Sony UX-S)
40 Hz to 14 kHz (±3 dB)
With Type I cassette (Sony HF-S)
40 Hz to 13 kHz (±3 dB)

Wow and flutter: 0.1% (WRMS)

Compact disc player

Laser	Semiconductor laser
Wavelength	780 – 790 nm
Frequency response	2 Hz to 20 kHz ±1 dB
Signal-to-noise ratio	More than 93 dB
Dynamic range	More than 90 dB
Harmonic distortion	Less than 0.01% (1 kHz)
Channel separation	More than 90 dB (1 kHz)

General

Power requirements	120 V AC, 60 Hz
Power consumption	115 W
Mass	Approx. 11.2 kg (24 lb 11 oz)
Dimensions	Approx. 355 x 395 x 405 mm ($14 \times 15^5/_8 \times 16$ inches) (w/h/d, including projections)

Speakers (SS-G3000)

Speaker system	3-way speaker system
Mass	Approx. 3 kg per speaker (6 lb 10 oz)
Dimensions	Approx. 220 x 395 x 180 mm ($8^3/_4 \times 15^5/_8 \times 7^1/_8$ inches) (w/h/d, including projections)

Supplied accessories

Remote commander RM-S221	(1)
Batteries Sony SUM-3 (NS)	(2)
FM wire antenna	(1)
AM loop antenna	(1)

Design and specifications are subject to change without notice.

Troubleshooting Guide

Before going through the check list below, first refer back to the connections and operating procedures.
Should any problem persist after you have made these checks, consult your nearest Sony service facility.

General

Symptom	Cause	Remedy
No power.	AC power cord is not connected securely.	Connect the AC power cord securely.
No sound.	Volume is not turned up.	Turn up the volume.
	Wrong connection.	Connect the speaker cords correctly.
	Loose connections.	Make connections securely.
Reversed left and right sound.	Wrong connection.	Connect the speaker cords correctly.
Severe hum or noise.	Loose connections.	Make connections securely.
	Unit is near TV/VCR.	Move TV/VCR away from the unit.

Tuner

Symptom	Cause	Remedy
The "TUNED" or "STEREO" indicator blinks.	Antenna is not aimed in the right direction.	Adjust the location and direction of the antenna.
	Weak signal.	Connect to an external antenna if the indication still blinks. Set the STEREO/MONO button to MONO.
Severe hum or noise.	Antenna is not aimed in the right direction.	Adjust the location and direction of the antenna.
	Weak signal.	Connect to an external antenna if hum or noise still interferes with reception.

Cassette deck

Symptom	Cause	Remedy
You cannot play back a tape.	❚❚ PAUSE is engaged.	Press the ❚❚ PAUSE button to release the unit from the pause mode.
You cannot record on a tape.	The tab has been removed from the cassette.	Cover the opening with plastic tape.
You cannot dub tapes.	The tab of the cassette in deck B has been removed.	Cover the opening with plastic tape.
Unclear recording or playback.	Dirty head.	Clean and demagnetize the recording/playback head.
Excessive wow or flutter, or sound dropout.	Dirty capstan and pinch roller.	Clean the capstan and pinch roller.
Incomplete erasure.	Magnetized head.	Demagnetize the erasing head.

Troubleshooting Guide

CD Player

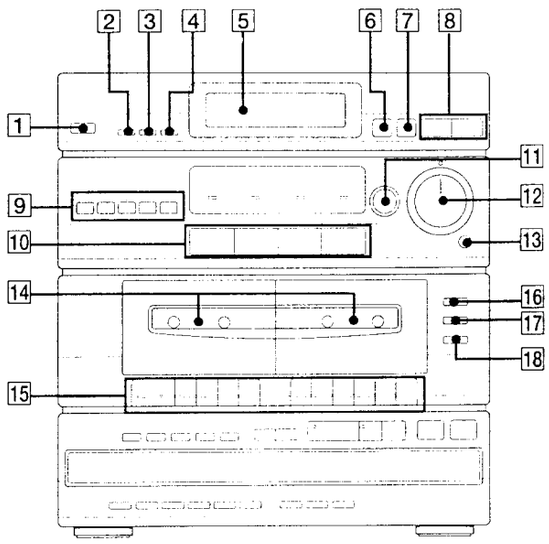
Symptom	Cause	Remedy
The disc tray does not close.	The disc is not placed correctly.	Place the disc correctly on the disc tray.
Play does not start.	Dirty disc.	Clean the disc.
	The disc is inserted upside down.	Insert the disc with the printed side up.
	❚❚ is engaged.	Press the ► or ❚❚ button again to release it.
	Moisture condensation.	Leave the unit turned on for approximately one hour.
Play does not begin from the first selection.	The unit is in the program or shuffle mode.	Press the CONTINUE button.

Remote commander

Symptom	Cause	Remedy
The remote commander does not operate the unit.	The batteries are run down.	Replace both batteries.
	The remote commander is not pointed at the remote sensor.	Point the remote commander at the sensor.
	There is an obstacle between the remote commander and the unit.	Remove the obstacle.
	The remote commander is too far from the unit.	Move closer.
Operation is not possible.	The internal control program may not be functioning.	Turn off the power and turn it again.

Controls

Refer to the pages indicated in parentheses for details.



Tuner

1 POWER switch (7)
2 MEMORY button (10)
3 STEREO/MONO button (9)
4 TUNING/PRESET button (9, 10, 11)
5 Display window
6 BAND button (9)
7 SHIFT button (10, 11)
8 DUAL MODE TUNING +/– buttons (9, 10, 11)

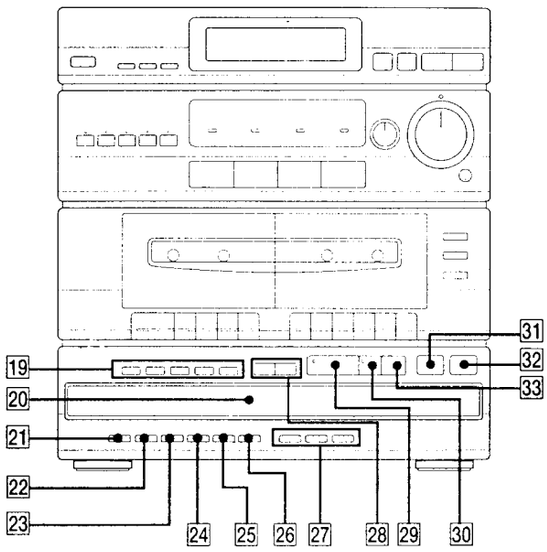
Amplifier

9 PRESET EQUALIZER buttons and indicators (8)
10 Function selectors and indicators
11 SURROUND control (8)
12 VOLUME control (8)
13 HEADPHONES jack (8)

Cassette Deck

14 Cassette holders
15 Tape operation buttons (12)
◄◄ Leftward fast winding
►► Rightward fast winding
► Forward play
■/⏏ Stop/eject
❚❚ PAUSE Pause
● REC Record (only for deck B)
16 DOLBY NR (Noise Reduction) (ON/OFF) switch (12, 13, 15)
17 TAPE SELECT (TYPE I/TYPE II) button (12, 13, 15)
18 DUBBING SPEED (HIGH/NORMAL) button (15)

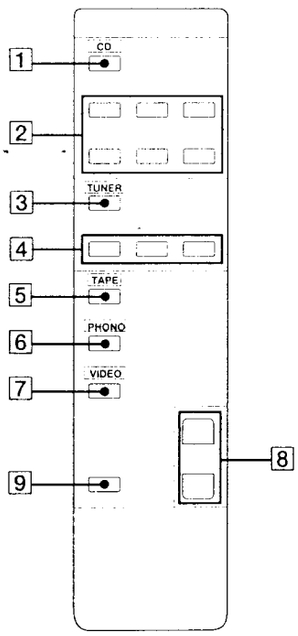
Controls



Compact Disc Player

19 DISC SELECT 1-5 button (16, 18, 19, 20, 21)
20 Disc Tray
21 TIME button (7)
22 REPEAT button (24)
23 MUSIC SCAN button (23)
24 CHECK (program check) button (21)
25 CLEAR (program clear) button (21)
26 EDIT button (25)
27 PLAY MODE buttons
CONTINUE button (19, 21, 26)
SHUFFLE button (19)
PROGRAM button (20, 22)
28 ⏮ ◀◀/▶▶ ⏭ AMS* buttons (18)
29 ► (play) button and indicator (16)
30 ❚❚ (pause) button and indicator (16)
31 DISC SKIP button (16, 18)
32 ⏏ OPEN/CLOSE button (16)
33 ■ (stop) button (16)

* AMS is the abbreviation of Automatic Music Sensor.



Remote Commander RM-S221

1 CD function button
2 CD operation buttons
DISC SKIP button, ⏮ / ⏭ (AMS*) buttons, ► (play) button, ❚❚ PAUSE button , ■ (stop) button
3 TUNER function button
4 Tuner operation buttons
SHIFT button
PRESET +/– butons
These buttons are used to select the preset station number.
5 TAPE function button
6 This button is inoperative with this unit.
7 VIDEO function button
8 VOL (volume) +/– buttons
9 SELECT 5 button
Each time the button is pressed, the preset equalization switches among 5 preset patterns (FLAT, DANCE, POPS, ROCK and CLASSIC).

* AMS is the abbreviation of Automatic Music Sensor.

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